Translation of the reasoning of Official Action

Notification of reason for rejection

The number of application: Japanese Patent Application 2004-553826
Drafting date: June 11, 2008
Name of the Examiner: Kazuyuki Ichiji
Attorney for the applicant: Ichio Shamoto (with five others)
Article applied: Article 29 (2)

The present application is to be rejected based on the following ground. If the applicant wants to file a response to the outstanding official action, the applicant is required to file a response within three months from the dispatch of this notification.

Reasons

The inventions set forth in the following claims are recognized to be such as could have easily been accomplished before the filing of the subject application by any person having common knowledge in the technical field concerned, on the basis of the inventions described in the following publications distributed in Japan or foreign countries or made available to the public through telecommunication media before the filing date of the subject application, and therefore are not eligible for patent under the provisions of Art. 29, Par. 2 of the Japanese Patent Law.

Remarks (refer to the List of Cited Refererences)

Claims 1, 5, 11, and 16 to 18
Cited References 1 and 2

Notes:

Cited Reference 1 relates to a method for CG surface shading using a texture map and sets forth an improved surface shading technique for real-time CG rendering in which a physical light reflectance texture map is computed and stored during the CG development phase, then later applied during the real-time rendering phase, the technique allowing Bidirectional Reflectance Distribution Function (BRDF) texture map to be used in combination with textured surfaces such as skin. Cited Reference 1 thus discloses a technique equivalent to "light intensity matrix" in the invention described in Claim 1 of the subject application (refer in particular to paragraph [0029]).

Further, Cited Reference 2 relates to an image generation system and sets forth that a blurred image as an object to be combined with an original image is generated by: subjecting the original image to various geometry processes such as coordinate transformation, perspective transformation, light source calculation and the like at a geometry processing part; storing object

data resulting from the geometry processes; and setting the original image as a texture and mapping the texture in a bilinear filter system to the object while shifting texture coordinates of the object, at an blurred image generation part. Cited Reference 2 thus discloses a technique equivalent to "producing a blurred matrix" in the invention of Claim 1 of the subject application (refer in particular to paragraphs [0053] and [0056]).

Cited Reference 2 also sets forth in paragraph [0060] that α combination of the original image and the blurred image is carried out for each of R, G and B color elements (equivalent to "three color separation channels" in the invention of Claim 11 of the subject application) in the original image and the blurred image.

Accordingly, those skilled in the art could have readily conceived of accomplishing the inventions in Claims 1, 5, 11, and 16 to 18 of the subject application, by applying the techniques described in Cited Reference 2 to the technique described in Cited Reference 1.

Claims 2, 3, 19 and 20
Cited References 1 to 3
Note:

Cited Reference 3 sets forth that a texture for bump mapping is produced in expressing a dinosaur skin by attaching a texture (refer in particular to page 117).

[Partial translation of the reference 3 by Y&H]
(1) lower right portion, page 2
Here, wrinkles are drawn in white and black on the clipped image to prepare a texture for bump mapping.

(2) lower left portion, page 2
A Stegosaurus' body (single) is selected, and two prepared textures are used with [Color] and [Bump] functions of the shader editor.

Claim 4
Cited References 1 to 4
Note:

Cited Reference 4 discloses a technique for image generation with which a human head is measured by a scanner capable of inputting concurrently shape and color information of an object surface, and surface color information is texture-mapped to the input three-dimensional shape data (refer in particular to pages 467 and 469).

[Partial translation of the reference 3 by Y&H]

[Upper left portion of page 467]
The scanner discussed in this article has been designed to accomplish

this objective and allows "completely" synchronized (concurrent) entries of three-dimensional shape information and superficial color information of an object to thereby expand an application area (using three-dimensional information).

[middle left portion of page 469]
FIG. 3(b) shows superficial color information (24-bit full color, 8 bits each for R, G and B) with a resolution of 512 x 256. FIG. 3(c) shows an image that is generated by texture-mapping of the superficial color information in FIG. 3(b) to the shape information in FIG. 3(a).

Claims 6 and 7
Cited References 1, 2 and 5
Note:

As shown in Cited Reference 5, for example, it is a well-known technique to use MIP map data in texture-processing and shading a three-dimensional image.

Claims 8, 12 and 14
Cited References 1, 2 and 6
Note:

Cited Reference 6 relates to a method for selective application of focusing/defocusing (selective blurring) effects to a computer-generated image, and sets forth that: image pixels are filtered using contributions from other pixels of the image about the image pixel and with filter coefficients (equivalent to "attenuation factor for each ... lumel" in the invention of Claim 12 of the subject application) determined in part by the focus depth; in the filtering process, the image pixels are grouped into blocks of adjoining image pixels; and substantially all of the image pixels of the blocks are preferably convolution filtered (equivalent to "convolving" in the invention of Claim 8 of the subject application) with a filter kernel having contributions from other pixels of the block close to the image pixel (refer in particular to page 4, lines 4 to 6, page 5, lines 13 to 19, and page 6, lines 7 and 8).

Claim 9
Cited References 1, 2 and 7
Note:

Cited Reference 7 relates to frequency processing of a radiographic image and sets forth that an image is blurred by frequency processing with the use of an FFT, as a possible method of suppressing graininess of an image resulting from radiation quantum noise or the like, by image processing (refer in particular to page 3, the right upper column, lines 9 to 13, and the left lower column, lines 9 to 14).

<Claims for which no reason for rejection is found>

At present, no reason for rejection has been found for the inventions described in Claims 10, 13 and 15. A new reason for rejection will be issued if

found.

List of the Cited References
1. Japanese Patent Application Public-disclosure No. 2002-208031 official gazette
2. Japanese Patent Application Public-disclosure No. 2002-183753 official gazette
3. "Real Abilities of Low-priced CG Software", Super Guidebook for 3DCG Creators, 1st edition/CG & Digital Video WORLD SPECIAL, Japan, Works Corporation Inc., May 1, 1999, p. 116 to 119
4. Yasuhiko Watanabe et al., "Synchronized Acquisition of Cylindrical Range and Color Data", NTT R&D, Telecommunications Association, April 10, 1993, 42nd volume, 4th issue, p. 465 to 476
5. Japanese Patent Application Public-disclosure No. 8-255264 official gazette
6. Japanese Patent Application Public-disclosure No. 11-513162 official gazette
7. Japanese Patent Application Public-disclosure No. 1-106275 official gazette
(Note) Some or all of the listed non-patent references may not be transmitted due to legal or contractual restrictions.

Record of results of prior art search
*Field of search
IPC G06T15/00 to 17/50
A63F13/00
DB name CSDB (Japan Patent Office)
*Prior art reference
Japanese Patent Application Public-disclosure No. 2002-203255 official gazette

The record of results of prior art search does not constitute part of the reasons for rejection.